Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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July 29, 2008

Scott Siddoway
Colstrip Energy Limited Partnership
1087 West River Street, Suite 200
Boise, Idaho 83702

Dear Mr. Siddoway:

Air Quality Permit #2035-04 is deemed final as of July 29, 2008, by the Department of Environmental Quality (Department). This permit is for a coal fired power generation facility. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

Trista Glazier
Air Quality Specialist
Air Resources Management Bureau
(406) 444-3403

VW:TG
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

# Air Quality Permit #2035-04

Colstrip Energy Limited Partnership
1087 West River Street, Suite 200
Boise, Idaho 83702

July 29, 2008

MONTANA AIR QUALITY PERMIT

Issued To: Colstrip Energy Limited Partnership
1087 West River Street, Suite 200
Boise, Idaho 83702

Permit: #2035-04
Administrative Amendment (AA) Request Received: 4/15/08
Department Decision on AA: 7/11/08
Permit Final: 7/29/08
AFS #: 087-0007

An air quality permit, with conditions, is hereby granted to Colstrip Energy Limited Partnership (CELP), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq*., as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

CELP operates a coal fired power generation facility located approximately six miles north of Colstrip, Montana. The plant site is located on North 1/2, Section 32, Township 3 North, Range 41 East in Rosebud County, Montana.

B. Current Permit Action

On April 15, 2008, the Department of Environmental Quality (Department) received a request to remove the ambient air quality monitoring requirements from Montana Air Quality Permit (MAQP) #2035-03. The current permit action removes those requirements as well as updates the permit to reflect current permit format, language, and rule references.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Coal haul trucks are to be covered during hauling operations (ARM 17.8.749).

2. The unloading of coal shall be in an enclosed structure and controlled by a baghouse. Particulate matter less than 10 microns ($PM_{10}$) emissions from the baghouse shall not exceed 0.005 grams/dry standard cubic foot (gr/dscf) (ARM 17.8.752).

3. The coal crushing, screening, and transfer emissions are to be vented to a baghouse for particulate control. $PM_{10}$ emissions from the baghouse shall not exceed 0.006 gr/dscf (ARM 17.8.752).

4. The coal storage bunker shall be controlled by two baghouses. $PM_{10}$ emissions from each baghouse shall not exceed 0.01 gr/dscf (ARM 17.8.752).

5. Limestone truck unloading, handling, and storage shall be controlled by a baghouse. $PM_{10}$ emissions from the baghouse shall not exceed 0.01 gr/dscf (ARM 17.8.752).

6. Fly ash conveying and storage shall be controlled by a baghouse. $PM_{10}$ emissions from the baghouse shall not exceed 0.004 gr/dscf (ARM 17.8.752).

7. Bed ash conveying and storage shall be controlled by a baghouse. $PM_{10}$ emissions from the baghouse shall not exceed 0.004 gr/dscf (ARM 17.8.752).

8. Ash storage silo unloading shall be controlled by a baghouse and covered haul trucks. $PM_{10}$ emissions from the baghouse shall not exceed 0.01 gr/dscf (ARM 17.8.752).

9. CELP shall be subject to all applicable provisions, as appropriate, of 40 CFR 60, Subpart Da 60.40Da through 60.52Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978) and Subpart Y - Standards of Performance for Coal Preparation Plants (ARM 17.8.340, 40 CFR 60, Subpart Da, and 40 CFR 60, Subpart Y).

10. CELP shall operate and maintain a baghouse on the Circulating Fluidized Bed (CFB) boiler. The CFB boiler's emissions for the pollutants listed below shall not exceed the following for the times identified (ARM 17.8.749).

| Pollutant | Annual | Daily | 3-hour | 1-hour |
|---|---|---|---|---|
| **$SO_2$** | 1,840 tons | 5.04 tons | 432 lbs/hr | 574 lbs |
| **$NO_x$** | 1,435 tons | 7,864 lbs | | 328 lbs |
| **CO** | 232 tons | 1,272 lbs | | 53 lbs |
| **$PM_{10}$** | 26.28 tons | 144.0 lbs | | 6.0 lbs |

11. CELP shall not cause to be discharged into the atmosphere from any 40 CFR 60 Subpart Da affected facility any gases which contain sulfur dioxide ($SO_2$) in excess of (ARM 17.8.340 and 40 CFR 60, Subpart Da):

    a. 1.20 pounds per million British thermal units (lb/MMBtu) heat input and 10 percent of the potential combustion concentration (90 percent reduction), or

    b. 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lb/MMBtu heat input1 per 40 CFR 60.43da.

12. CELP shall not cause to be discharged into the atmosphere from any 40 CFR 60 Subpart Da affected facility any gases which contain particulate matter in excess of (ARM 17.8.340 and 40 CFR 60, Subpart Da):

    a. 0.03 lb/MMBtu heat input derived from the combustion of solid, liquid, or gaseous fuel; and

    b. 1 percent of the potential combustion concentration (99 percent reduction) when combusting solid fuel per 40 CFR 60.42da.

13. CELP shall burn fuel containing more than 25%, by weight, coal refuse on an annual basis (ARM 17.8.749).

14. CELP shall use water spray to control fugitive emissions of particulate matter from the ash disposal area. Ash at the disposal site shall not be handled in such a manner as to create emissions in excess of 20% opacity (ARM 17.8.752).

15. If a portion of the ash disposal area is inactive and the Department determines it to be necessary, CELP shall provide mitigative measures, including, but not limited to, revegetation, to control wind-blown emissions from the area. The Department shall

determine the necessity of the control measures above on the basis of Department observation, results of ambient air quality monitoring, complaints, or any combination of the above (ARM 17.8.752).

16. The Department shall notify CELP when a change is made to the Cooperative Enforcement Agreement between Montana and EPA Region VIII concerning the enforcement guidelines for continuous emission monitors. The current agreement is dated March 30, 1993 (ARM 17.8.749).

17. CELP shall maintain the stacks at the specified heights (ARM 17.8.749):

    a. The coal dump baghouse 40 feet above the ground;

    b. The coal crushing baghouse 40 feet above the ground; and

    c. The fly ash and bed ash storage baghouse/cartridge 22 feet above the ground.

18. The exhaust from the CFB boiler shall be discharged from a two hundred foot stack (ARM 17.8.749).

19. CELP shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

20. CELP shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

21. CELP shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.20 (ARM 17.8.749).

B. Testing Requirements

1. Enforcement of Sections II.A.10, II.A.11, II.A.12, and II.A.19 requirements, where applicable, shall be determined by utilizing data taken from continuous emission monitors or approved test methods contained in the Montana Source Test Protocol and Procedures Manual. Opacity compliance may be determined via EPA Method 9 by a qualified observer. The above does not relieve CELP from meeting any applicable requirements of 40 CFR Part 60. Reporting requirements shall be as specified in 40 CFR 60, Subpart Da and Section II.B and II.D of this permit (ARM 17.8.340 and 40 CFR 60, Subpart Da).

2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. CELP shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. CELP shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by CELP as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

D. Continuous Emissions Monitoring Systems (CEMS)

The following monitors shall be installed and operated on the boiler stack outlet: $SO_2$, nitrogen oxide ($NO_x$), opacity, carbon monoxide (CO), and oxygen ($O_2$) or carbon dioxide ($CO_2$). Said monitors shall comply with the applicable provisions of 40 CFR 60, Subpart Da, 60.49Da; Subpart A, 60.7; Appendix B, Specifications 1, 2, 3 and 4; and Appendix F. The monitors shall also conform, but not be limited to, as outlined in Attachment 2 (ARM 17.8.340 and 40 CFR 60, Subpart Da).

SECTION III: General Conditions

A. Inspection – CELP shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if CELP fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving CELP of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*. (ARM 17.8.756).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq*., MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the

Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by CELP may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

## Attachment 2 (CEMS)

1. Continuous Opacity Monitoring System (COMS)

a. CELP shall install, calibrate, maintain, and operate continuous opacity monitoring systems (COMS) to monitor and record the opacity of the gases discharged into the atmosphere from the boiler.

(1) The span of these systems shall be set at 100% opacity.

(2) The COMS shall conform to all requirements of 40 CFR 60, Appendix B, Performance Specification 1 - Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources (PS1).

(3) The COMS data will be used to demonstrate compliance with the 20% opacity limitation in Section II.A.14. CELP shall maintain compliance with the 20% opacity limitation, as demonstrated by the COMS.

b. CELP shall submit a written report of all excess opacity emissions quarterly. Periods of excess emissions shall be defined as those averaged over a six-minute period for which the average is greater than 20% opacity. The report shall be in the format contained in Attachment 2 and include, as a minimum, the following:

(1) The magnitude of excess emissions and the date and time of commencement and completion of each time period of excess emissions.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the COMS was inoperative except for zero and span checks. The nature of the system repairs or adjustments must also be reported.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(5) The percentage of time the COMS was operating shall be calculated as follows:

$$\left(1 - \frac{\text{hours of COMS downtime during reporting period}^{*}}{\text{hours the source operated during reporting period}}\right) \times 100$$

[*]All time required for calibration and to perform preventative maintenance must be included in COMS downtime.

This shall be reported as percent monitor availability during plant operation. CELP shall maintain a minimum of 95% monitor availability during plant operation on a quarterly basis.

Nothing in this section shall preclude enforcement action for data availability that is less than 100 percent but equal to or greater than 95% if the conditions in Section 5 of this attachment are not satisfied.

(6) The percentage of time the COMS indicated compliance. This shall be calculated as:

$$(1 - \frac{\text{total hours of excess emissions during reporting period}}{\text{total hours of COMS availability during reporting period}}) \times 100$$

This shall be reported as percent compliance. CELP shall maintain compliance with the 20% limitation, as demonstrated by the COMS in accordance with Section II.A.14.

(7) The excess emission reports shall be submitted within 30 days following the end of the reporting period (January-March, April-June, July-September, and October-December).

c. CELP shall inspect and audit the COMS quarterly, using neutral density filters. CELP shall conduct these audits using the appropriate procedures and forms in the EPA Technical Assistance Document: Performance Audit Procedures for Opacity Monitors (EPA-600/8-87-025, April 1987). The results of these inspections and audits shall be included in the quarterly excess emission report.

d. CELP shall maintain a file of all measurements from the COMS performance testing measurements; all COMS performance evaluations; all COMS or monitoring device calibration checks and audits; adjustments and maintenance performed on these systems or devices recorded in a permanent form suitable for inspection. The file shall be retained on site for at least five years following the date of such measurements and reports. CELP shall supply these records to the Department upon request.

2. CEMS - $SO_2$

a. CELP shall install, calibrate, maintain, and operate CEMS to monitor and record the $SO_2$ concentrations of the gases discharged into the atmosphere from the boiler.

(1) The span of this system shall be set as required in 40 CFR 60.49Da.

(2) The CEMS shall conform to all requirements of 40 CFR 60, Subpart Da - Standards of Performance for Electric Utility Steam Generation Units; Appendix B, Performance Specification 2 - Specifications and Test Procedures for $SO_2$ and $NO_x$ Continuous Emission Monitoring Systems in Stationary Sources (PS2); and Appendix F, Quality Assurance Procedures.

(3) The CEMS data will be used to demonstrate compliance with the limitations contained in Section II.A.10 and II.A.11. CELP shall maintain compliance with the limitations, as demonstrated by the CEMS.

b. CELP shall submit a written report of all excess emissions quarterly. Periods of excess emissions shall be defined as those emissions calculated on an hourly, 3-hour, calendar day, annual, and rolling 30-day basis which are greater than the limitations. The report shall be in the format contained in Attachment 2 and including, as a minimum, the following:

(1) The magnitude of excess emissions and the date and time of commencement and completion of each time period of excess emissions.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the CEMS was inoperative except for zero and span checks. The nature of the system repairs or adjustments must also be reported.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(5) The percentage of time the CEMS was operating. This shall be calculated as

$$\left(1 - \frac{\text{hours of CEMS downtime during reporting period}^{*}}{\text{hours the source operated during reporting period}}\right) \times 100$$

*All time required for calibration and to perform preventative maintenance must be included in CEMS downtime.

This shall be reported as percent monitor availability during plant operation. CELP shall maintain a minimum of 95% monitor availability during plant operation on a quarterly basis.

Nothing in this section shall preclude enforcement action for data availability that is less than 100%, but equal to or greater than 95% if the conditions in Section 5 of this attachment are not satisfied.

(6) The percentage of time the CEMS indicated compliance. This shall be calculated as:

$$\left(1 - \frac{\text{total hours of excess emissions during reporting period}}{\text{total hours of CEMS availability during reporting period}}\right) \times 100$$

This shall be reported as percent compliance. CELP shall maintain compliance with the limitations, as demonstrated by the CEMS.

(7) The excess emission reports shall be submitted within 30 days following the end of the reporting period (January-March, April-June, July-September, and October-December).

c. CELP shall inspect and audit the CEMS quarterly to meet the requirement contain in 40 CFR 60 Appendix F. CELP shall conduct these audits using the appropriate procedures. The results of these inspections and audits shall be included in the quarterly excess emission report.

d. CELP shall maintain a file of all measurements from the CEMS and performance testing measurements; all CEMS performance evaluations; all CEMS or monitoring device calibration checks and audits; adjustments and maintenance performed on these systems or devices recorded in a permanent form suitable for inspection. The file shall be retained on site for at least five years following the date of such measurements and reports. CELP shall supply these records to the Department upon request.

3. CEMS - $NO_x$

a. CELP shall install, calibrate, maintain, and operate CEMS to monitor and record the $NO_x$ concentrations of the gases discharged into the atmosphere from the boiler.

(1) The span of this system shall be set at 1,000 ppm.

(2) The CEMS shall conform to all requirements of 40 CFR 60, Appendix B, Performance Specification 2 - Specifications and Test Procedures for $SO_2$ and $NO_x$ Continuous Emission Monitoring Systems in Stationary Sources (PS2) and Appendix F, Quality Assurance Procedures.

(3) The CEMS data will be used to demonstrate compliance with the limitations contained in Section II.A.10. CELP shall maintain compliance with the limitations, as demonstrated by the CEMS.

b. CELP shall submit a written report of all excess emissions quarterly. Periods of excess emissions shall be defined as those emissions calculated on an hourly, calendar day, and annual basis which are greater than the limitations. The report shall be in the format contained in Attachment 2 and including, as a minimum, the following:

(1) The magnitude of excess emissions and the date and time of commencement and completion of each time period of excess emissions.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the CEMS was inoperative except for zero and span checks. The nature of the system repairs or adjustments must also be reported.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(5) The percentage of time the CEMS was operating. This shall be calculated as

$$\left(1 - \frac{\text{hours of CEMS downtime during reporting period*}}{\text{hours the source operated during reporting period}}\right) \times 100$$

*All time required for calibration and to perform preventative maintenance must be included in CEMS downtime.

This shall be reported as percent monitor availability during plant operation. CELP shall maintain a minimum of 95% monitor availability during plant operation on a quarterly basis.

Nothing in this section shall preclude enforcement action for data availability that is less than 100% but equal to or greater than 95% if the conditions in Section 5 of this attachment are not satisfied.

(6) The percentage of time the CEMS indicated compliance. This shall be calculated as:

$$(1 - \frac{\text{total hours of excess emissions during reporting period}}{\text{total hours of CEMS availability during reporting period}}) \times 100$$

This shall be reported as percent compliance. CELP shall maintain compliance with the limitations, as demonstrated by the CEMS.

(7) The excess emission reports shall be submitted within 30 days following the end of the reporting period (January-March, April-June, July-September, and October-December).

c. CELP shall inspect and audit the CEMS quarterly using Certified Gas Audits or Relative Accuracy Audits (RAA). CELP shall conduct these audits using the appropriate procedures. The results of these inspections and audits shall be included in the quarterly excess emission report.

d. CELP shall maintain a file of all measurements from the CEMS and performance testing measurements; all CEMS performance evaluations; all CEMS or monitoring device calibration checks and audits; adjustments and maintenance performed on these systems or devices recorded in a permanent form suitable for inspection. The file shall be retained on site for at least five years following the date of such measurements and reports. CELP shall supply these records to the Department upon request.

4. CEMS - CO and $O_2$ or $CO_2$

a. CELP shall install, calibrate, maintain, and operate CEMS to monitor and record CO and $O_2$ or $CO_2$ of the gases discharged into the atmosphere from the boiler.

(1) The CEMS shall conform to all requirements of 40 CFR 60, Subpart Da - Standards of Performance for Electric Utility Steam Generation Units; Appendix B, Performance Specification 3 - Specifications and Test Procedures for $O_2$ and $CO_2$ Continuous Emission Monitoring Systems in Stationary Sources (PS3) and Performance Specification 4 -Specifications and Test Procedures for CO Continuous Emission Monitoring Systems in Stationary Sources (PS4); and Appendix F, Quality Assurance Procedures.

(2) The CEMS shall conform to all requirements of 40 CFR 60.47a.

5. In addition to complying with the minimum quarterly data recovery rates specified in this attachment, CELP shall undertake its best efforts to strive for and achieve the highest average quarterly data recovery rate which is practical. The determination of what is practical and, therefore, acceptable data loss shall be made consistent with Section 6 of this attachment.

6. In regards to quarterly data recovery rate requirements specified in this attachment, the determination of what is practical and, therefore, acceptable data loss shall consider whether:

a. CELP has properly operated and maintained the continuous emission monitors and associated data acquisition systems, including the performance of preventative maintenance, the maintenance of the spare parts inventory and the conduct of the quality assurance requirements.

b. CELP has taken immediate and appropriate action to correct a malfunction in the continuous emission monitors and associated data acquisitions systems.

Permit Analysis
Colstrip Energy Limited Partnership
Montana Air Quality Permit (MAQP) #2035-04

## I. Introduction/Process Description

Colstrip Energy Limited Partnership (CELP) owns and operates a coal fired power generation facility. The facility is located approximately six miles north of Colstrip, Montana. The plant site is located on North 1/2, Section 32, Township 3 North, Range 41 East in Rosebud County, Montana.

### A. Permitted Equipment

The general facilities for the coal fired power generator are listed below:

1. Coal truck dump, hoppers, and crushers with associated baghouse particulate control.
2. Coal conveyors and storage silos.
3. Steam turbine (1).
4. Circulation fluidized bed (CFB) boiler (1).
5. Air Cool Condenser (ACC) unit.
6. Ash disposal consisting of silo and landfill operations.
7. Two hundred foot stack on the CFB Boiler.
8. Limestone handling facilities.

### B. Source Description

The electric generating facility was designed to burn low-British thermal unit (BTU) waste coal. The facility uses a CFB boiler with a design steam flow of approximately 355,000 pounds per hour (lbs/hr) at 1300 pound-force per square inch gauge (PSIG) and 955 °F. Limestone is injected into the fluidized bed to control sulfur dioxide emissions.

Coal is delivered to the facility by trucks and trailers and crushed at the facility. Limestone is delivered to the facility in trucks and trailers, but does not require crushing or screening. Ash from the boiler is discharged as either bed ash or fly ash. Both types of ash are collected in separate systems and conveyed to a common silo. The ash is transported to an on-site disposal area.

### C. Permit History

The original air quality **Permit #2035-00** was issued to AEM Corporation for the construction and operation of a coal-fired power generation facility and a coal liquefaction-cogeneration facility from the Montana Department of Health and Environmental Sciences, Air Quality Bureau (predecessor to the Montana Department of Environmental Quality (Department)) on September 10, 1985. The application was received on April 26, 1985 and deemed complete on June 25, 1985.

The coal-fired power generation facility was identified as a major stationary source as defined in ARM 16.8.921(22)(a). Therefore, a Prevention of Significant Deterioration (PSD) review was conducted for the permit application.

Coal for the facility comes from the nearby Western Energy mine or other nearby mines. The coal used is called culm, which is a refuse coal whose uses are somewhat limited. AEM planned to utilize 364,000 ton per year (TPY) of refuse coal, 220,752 TPY of PDF (char), 359,400 barrels (Bbl) of oil, 390,000,000 cubic feet per year ($ft^3$/yr) of noncondensible gases, 59,568 TPY of water, and use 11,000 TPY of dolomite lime as supplemental boiler sulfur dioxide ($SO_2$) control to produce 30.65 megawatts (MW) of power.

The first change to the permit was given **Permit #2035-A** and was issued on December 22, 1987. This permit was issued to Montana One Partners of LaJolla, California who took over ownership from AEM Corporation. The change requested was to allow the company to construct only the power generation portion of the process and to produce 39 gross megawatts (GMW).

The Montana One Partners changed the project description. Montana One Partners planned to utilize 306,600 TPY of refuse coal to produce 39 GMW of electrical power. A circulating fluidized bed combustion boiler with a heat rating of 485 million BTU's per hour is used in conjunction with a limestone injection for $SO_2$ emission control. Approximately 27,000 TPY of limestone is used. Only one steam turbine was planned for the project under this application. A baghouse was installed to control particulate emissions. All other equipment involved with the project (e.g., coal handling, crushing and conveying) remained the same as originally proposed in Permit #2035. The emissions from the handling and crushing are controlled by a baghouse.

**Permit #2035-02** issued on April 15, 1994 was requested by CELP who was the current owner of the facility. The name on the permit was changed from Montana One Partners to Colstrip Energy Limited Partners. The ownership transfer occurred on June 10, 1988.

The purpose of the revision was to include limitations in the permit to protect the PSD increment for the 3-hour $SO_2$ standard and the Montana ambient air quality 1-hour standard for nitrogen oxide ($NO_x$). The emission limitations were included in Section II.F. and G. These changes did not change the annual allowable emissions from the plant or the daily $SO_2$ and $NO_x$ limitations. The limitations were added to the rolling 30-day averages required under 40 CFR 60, Subpart Da. Modeling was done to determine the amount of increment consumed as a result of these changes to the emission limitations. These changes resulted in changes in the reporting requirements and compliance demonstrations.

The emission limitation in Section II.F. were developed based on the Department's review of information supplied by CELP. CELP proposed $SO_2$ limits of 450 pounds per hour (lbs/hour) on a three-hour average and 590 lbs/hour on a one hour average and a $NO_x$ limit of 500 lbs/hour on a one-hour average. The Department determined that the appropriate $SO_2$ limits should be 432 lbs/hour on a three-hour average and 574 lbs/hour on a one-hour average. These limits were arrived at based on the data submitted by CELP with the elimination of the data for June 12, 1992, based on concerns about the representativeness of the data. After review of the CEMS data submitted, the Department and CELP determined the $NO_x$ limit should be 328 lbs/hour, which was the number modeled in the original application.

The Department also made several other changes to the permit. The CEMS installation, operation, and reporting requirements have been clarified. All references to the coal liquefaction-cogeneration facility were removed since the facility was not constructed.

After the preliminary determination (PD) of Permit #2035-02 was issued, CELP provided comments on the PD dated February 15, 1994. As a result of these comments, the Department made a number of changes. The changes were completed as requested by CELP, except that the Department did not change the continuous emission monitor availability requirement. The continuous emission monitor availability remained at 95%. The Department also included a condition in the permit which required the Department to notify CELP when a change is made to the Cooperative Enforcement Agreement between Montana and EPA Region VIII concerning the enforcement guidelines for continuous emission monitors. The Department did not change the general condition Section IV.H or the wording in Section II. R. For clarity, however, the issuance of Permit #2035-02 did not authorize any new construction at the facility.

CELP proposed in Permit Application #2035-03 the removal of the plant-wide emission limits in Section II.F of Permit #2035-02 and the establishment of emission limits for point sources at the facility. The permit application did not seek any physical or operational changes to any process equipment at the facility. CELP also proposed removing from the permit the reference in Section II.S to the Hydrometrics letter, eliminating the ambient monitoring required in the permit, and clarifying language in Section II.J regarding sulfur content of waste coal.

CELP presented Permit Application #2035-03 as a major modification of this major stationary source. A major modification means any physical change in, or change in the method of operations of, a major stationary source. The permit application does not propose any physical or operational changes at the facility; however, Permit Alteration #2035-03 required a PSD review because the proposed particulate matter 10 microgram or less ($PM_{10}$) emission limits should have been addressed in PSD Permit Application #2035. Establishing PM-10 emission limits on a point source basis results in an allowable emissions increase of 17.94 TPY of PM-10. This is a significant emissions increase under PSD. The Department does not anticipate that actual emissions from the facility will change, since there will be no operational changes occurring.

Permit #2035-03 establishes emission limits for point sources at the facility and eliminates the total plant emission limits. Total plant emission limits for $SO_2$, $NO_x$, and carbon monoxide (CO) in Section II.F of Permit #2035-02 have been placed on the CFB boiler only. The CFB boiler is the only significant source of $SO_2$, $NO_x$, and CO at the facility. The opacity limitation has been placed in a condition and is applicable to all equipment at the facility. $PM_{10}$ emission limitations were established on the CFB boiler. PM-10 emission limitations were also established for all equipment, transfer points, and storage facilities currently controlled by a baghouse. The $PM_{10}$ emission limitation in the form of a grains per dry standard cubic foot (gr/dscf) limitations for these facilities was based on manufacturer's data submitted by CELP in the permit application.

Section II.S for Permit #2035-02 required that CELP handle ash disposed on site in accordance with the provisions specified in the Hydrometrics letter of April 24, 1985. The Hydrometrics letter contained provisions that moisture be added to the ash to prevent blowing and the disposal site be operated in a cut and fill operation. The letter also outlines in detail the soil handling and revegetation operations.

The Department's concern with the ash disposal area is that compliance be maintained with applicable requirements during operation of the disposal area and when the disposal area is inactive for any extended period of time. Therefore, Permit #2035-03 requires that water spray be used when ash is being deposited to control fugitive emissions. The permit also includes a provision requiring mitigative measures, including revegetation for the disposal area during inactive periods. This condition is intended to apply during extended inactive periods or closure.

Attachment 1 in Permit #2035-02 required CELP to monitor $PM_{10}$, $SO_2$, and ambient wind speed and direction. The current ambient monitoring site is located on the northwestern edge of the facility. The primary wind directions at the facility are from the southwest, west, and northwest. The Department believes the ambient monitoring site does not monitor a representative portion of the emissions from the facility. In order for the ambient monitors to be exposed to the average annual emissions from the facility, the monitoring site should be situated downwind of the power plant and ash disposal area. This would require that the monitoring site, in general, be located to the north of the CFB boiler stack and east to northeast of the ash disposal area.

Consequently, the Department has determined that completely eliminating the ambient monitoring network now operated by CELP would be inappropriate. The Department has determined that the ambient monitoring site should be moved to the east of the facility at a location to be determined by the Department. Permit #2035-03 requires that CELP monitor PM-10; however, ambient $SO_2$ monitoring at the facility will not be required. The Department is able to monitor the $SO_2$ emitted from the CFB boiler; if CELP demonstrates compliance with their $SO_2$ emission limits, $SO_2$ ambient standards should not be violated.

Section II.J of Permit #2035-02 required that the sulfur content of waste coal not exceed 3% as received. The Department removed this condition from Permit #2035-03 because the Department has conditions and limitations which protect NAAQS for $SO_2$.

**Permit #2035-03** replaced Permit #2035-02.

The Department received written comments on the PD of Permit #2035-03 from the Northern Cheyenne Tribe and CELP. As a result of these comments the Department made several changes requested by CELP. CELP requested that the Department reword all operations referred to as "coal" to "coal/waste coal." The Department responded that coal is a broad enough term to include all varieties of coal CELP is permitted to use at the facility. However, in a meeting on March 4, 1998, CELP explained they were concerned that it could be construed that CELP's operations referred to as coal where not permitted to process coal refuse. The Department stated that the facility is permitted in Section II.A.15 to burn coal refuse. The Department agreed to state in the permit analysis that the facility is permitted to process coal refuse at the facility. The equipment referred to as coal including the truck dump, hoppers, crushers, conveyors, and storage silos and all associated control equipment are permitted to process coal refuse. The meaning of the terms coal and coal refuse for Permit #2035-03 are defined in 40 CFR 60, Subpart Da.

The Department also agreed in the March 4, 1998, meeting to clarify language in Attachment 1 that discusses where the new ambient monitoring site will be located. The Department stated in the meeting that the intention is for the new location to be downwind of the power plant and the ash disposal area. This would require that the monitor be in a location generally north of the CFB boiler stack and east to northeast of the current ash disposal area.

The Department also agreed to correct typographic errors in the daily $SO_2$ limit and 1-hour $NO_x$ limit in Section II.A.10 that had been made from Permit #2035-02 to 2035-03. The Department lengthened the time from 90 to 180 days required for CELP to increase the stack heights specified in Section II.A.21. The Department changed the word "facility" in Sections II.B.1 and 2 to "CFB boiler stack." In Attachment 1 the language in the first sentence of paragraph 3 was changed from requiring CELP to start air monitoring at the new location within 90 days after Permit #2035-03 is final to requiring CELP to begin air monitoring at the new location within 90 days after the Department has approved a location.

Several other changes were requested by CELP and were not made to the PD. One of the requested changes was to eliminate Section III.H which refers to commencement of construction; the facility did not believe it applied to this permit. Permit #2035-03 does not authorize any new construction at the facility besides the increase of the stack heights for the coal dump baghouse, coal crushing baghouse, and the fly ash and bed ash storage baghouse/cartridge.

D. Current Permit Action

On April 15, 2008, the Department received a request to remove the ambient air quality monitoring requirements from MAQP #2035-03. The current permit action removes those requirements as well as updates the permit to reflect current permit format, language, and rule references. **MAQP #2035-04** replaces MAQP #2035-03.

E. Response to Public Comments (only if there are comments received)

| Person/Group Commenting | Permit Reference | Comment | Department Response |
|---|---|---|---|
| CELP | Section A.II.D. | Permit Condition ILD. regarding continuous monitoring systems references 40 CFR 60, Subpart Da, 60.47a. However, in the latest version of 40 CFR 60 (as of July 2007) 60.47Da now addresses commercial demonstration permits. The correct reference is now 60.49Da, for emissions monitoring requirements. | The reference was changed to 40 CFR 60.49Da. |
| CELP | Permit Analysis, Section II.B. | In the list of applicable Rules and Regulations in the Permit Analysis, Section II.B, the reference to ARM 17.8.204 Ambient Air Monitoring should be removed, since ambient air monitoring requirements have now been removed from the permit. | Reference to ARM 17.8.204 was removed. |

F. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

   CELP shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.221 Ambient Air Quality Standard for Visibility
6. ARM 17.8.222 Ambient Air Quality Standard for Lead
7. ARM 17.8.223 Ambient Air Quality Standard for $PM_{10}$

CELP must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). CELP is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

   a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

   b. 40 CFR 60, Subpart Da – Standard of Performance for Electric Utility Steam Generation Units. This subpart applies is each electric utility steam generating unit that is capable of combusting more than 73 MW (250 million British thermal units per hour (MMBtu/hr)) heat input of fossil fuel (either alone or in combination with any other fuel) and for which construction, modification, or reconstruction is commenced after September 18, 1978.

      The $NO_x$ emission limitations and monitoring requirements contained in Subpart Da do not apply to CELP since the facility burns more than 25%, by weight, refuse coal (40 CFR 60.44Da(a)(1)).

   c. 40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation Plants. This subpart applies to any of the following affected facilities in coal preparation plants which process more than 181 Mg (200 tons) per day: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems that commences construction or modification after October 24, 1974.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. CELP was not required to submit an application fee since the current permit action is administrative.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 TPY of any pollutant. CELP has a PTE greater than 25 TPY of $PM_{10}$, $SO_2$, $NO_x$, CO, and VOC; therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. CELP was not required to submit a permit application since the current permit action is administrative. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. CELP was not required to submit an affidavit of publication since the current permit action is administrative.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving CELP of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a listed source, but emissions are greater than or equal to 250 tons per year; therefore, the facility is major.

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:

a. PTE > 100 TPY of any pollutant;

b. PTE > 10 TPY of any one hazardous air pollutant (HAP), PTE > 25 TPY of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

c. PTE > 70 TPY of particulate matter with an aerodynamic diameter of 10 microns or less ($PM_{10}$) in a serious $PM_{10}$ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2035-04 for CELP, the following conclusions were made:

a. The facility's PTE is greater than 100 TPY for any pollutant.

b. The facility's PTE is less than 10 TPY for any one HAP and less than 25 TPY for all HAPs.

c. This source is not located in a serious $PM_{10}$ nonattainment area.

d. This facility is subject to NSPS under 40 CFR 60, Subparts Da and Y.

e. This facility is not subject to any current NESHAP standards.

f. This source is not a Title IV affected source, or a solid waste combustion unit.

g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that CELP is a major source of emissions as defined under Title V. CELP submitted a Title V operating permit application received on June 8, 1995. The Title V Permit #OP2035-00 was issued as Final on August 1, 1999. The proposed change also constitutes an administrative Title V operating permit modification. CELP submitted a request for an administrative modification to Title V Operating Permit #OP2035-00 concurrently with the current Montana Air Quality Permit permit action.

III. BACT Determination

A BACT determination is required for each new or altered source. CELP shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was not required for the current permit action because the current permit action is considered an administrative permit action.

IV. Emission Inventory

| **Source** | **Emissions in TPY** | | | | | |
|---|---|---|---|---|---|---|
| | **PM-10** | **PT** | **SO2** | **NOx** | **CO** | **VOC** |
| CFB Boiler - Coal Burning | 26.28 | 26.28 | 1840 | 1435 | 232 | 15.94 |
| Coal Dumping | 5.63 | 11.26 | | | | |
| Coal Crushing, Screening, and Transfer | 2.07 | 3.45 | | | | |
| Coal Bunker Bin Vent #1 | 0.38 | 0.38 | | | | |
| Coal Bunker Bin Vent #2 | 0.38 | 0.38 | | | | |
| Limestone Unloading, Handling, and Storage | 1.13 | 1.13 | | | | |
| Fly ash Conveying and Storage | 0.35 | 0.87 | | | | |
| Bed Ash Conveying and Storage | 0.45 | 1.12 | | | | |
| Ash Storage Silo | 0.34 | 0.34 | | | | |
| Ash Truck Unloading | 0.23 | 0.66 | | | | |
| Ash Disposal Fugitive | 1.98 | 3.96 | | | | |
| Hauling - Paved Roads | 2.43 | 12.42 | | | | |
| Hauling - Unpaved Roads | 2.91 | 6.46 | | | | |
| **Total** | **44.54** | **68.71** | **1840** | **1435** | **232** | **15.94** |

A complete emission inventory is on file with the Department.

V. Existing Air Quality

CELP is located in the North ½ Section 32, Township 3 North, Range 41 East in Rosebud County, Montana. The air quality of this area is classified as better than National Standards or unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for criteria pollutants.

VI. Ambient Air Impact Analysis

The Department determined, based on ambient air modeling, that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

| YES | NO | |
|---|---|---|
| X | | 1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights? |
| | X | 2. Does the action result in either a permanent or indefinite physical occupation of private property? |
| | X | 3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property) |
| | X | 4. Does the action deprive the owner of all economically viable uses of the property? |
| | X | 5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)]. |
| | | 5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests? |
| | | 5b. Is the government requirement roughly proportional to the impact of the proposed use of the property? |
| | X | 6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action) |
| | X | 7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the pubic generally? |
| | X | 7a. Is the impact of government action direct, peculiar, and significant? |
| | X | 7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded? |
| | X | 7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question? |
| | X | Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas) |

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis Prepared By: Trista Glazier
Date: 5/15/08